

ABSTRACT

A laser module includes: a sub-mount; a semiconductor laser secured to a surface of the sub-mount; and an optical waveguide device joined to the surface of the sub-mount by an adhesive layer so that the optical waveguide device is coupled optically with the semiconductor laser. A first groove is formed at the surface of the sub-mount at a region corresponding to an incident end side of the optical waveguide device, the first groove being formed parallel to an outgoing end face of the semiconductor laser with a predetermined space therefrom. The adhesive layer is formed so that an end of the adhesive layer on the incident end side of the optical waveguide device is positioned within a range from a position abutting with a distal edge of the first groove distant from the semiconductor laser to an inside of the first groove and does not contact with the outgoing end face of the semiconductor laser. Since the adhesive layer can be positioned within a preferable range, coupling misalignment resulting from distortion due to a temperature change can be suppressed.